Remarks

In the final Office Action, the Examiner rejected claims 35-54 under 35 U.S.C. § 112, second paragraph; rejected claims 35, 36, and 40-53 under 35 U.S.C. § 102(b) based on U.S. Patent No. 5,748,953 to Mizutani et al. ("Mizutani"); and rejected claims 37-39 and 54 under 35 U.S.C. § 103(a) based on Mizutani and U.S. Patent No. 6,081,774 to Hita et al. ("Hita").

By this Amendment, Applicant proposes amending claim 54 to correct a typographical error.

Regarding the rejection under 35 U.S.C. § 102(b), Applicant notes that although claims 35, 36, and 40-44 are listed in the initial statement of the rejection (Office Action, page 3), in the substantive rejection, the Examiner also refers to claims 45-53. Accordingly, Applicant will assume that claims 35, 36, and 40-53 stand rejected under 35 U.S.C. § 102(b). Additionally, in the initial statement of the rejection of claims 37-39 and 54, the Examiner only mentions Hita. However, in the substantive rejection, the Examiner also refers to Mizutani. Accordingly, Applicant will assume that the Examiner intended to reject these claims based on the combination of Mizutani and Hita.

Rejection Under
35 U.S.C. § 112, Second Paragraph

Claims 35-54 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for reciting the phrase "an example." The Examiner states that "'an example' renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention." (Office Action, page 2, citing

MPEP § 2173.05(d)). For the following reason, Applicant respectfully traverses this rejection.

MPEP § 2173.05(d) states that "exemplary claim language," such as claim language that refers to examples and preferences, may lead to confusion over the intended scope of the claim. This section of the MPEP lists a number of examples in which the intended scope of the claim was held to be unclear due to the use of exemplary language, such as: "R is a halogen, for example, chlorine," and "material such as rock wool or asbestos." (MPEP § 2173.05(d)). MPEP § 2173.05(d) further states, however, that there is no *per se* rule for rejecting claims as indefinite based on "exemplary language." Instead, the determination of whether a claim is indefinite is fact specific and the Examiner should analyze whether the metes and bounds of the claim are clearly set forth.

The pending claims, in contrast to the examples of the exemplary claim language given in the MPEP, do not recite a generic object or feature followed by an example of that object or feature. Instead, independent claim 35 recites, for example, "receiving a set of information that defines an example of information that is being sought." Applicant submits that in this context, the phase "an example" is not indefinite. The example "language" recited in claim 35 does not preface an actual example of information, but rather further defines the recited "set of information." Applicant notes that the specification does provide an actual example of the "set of information" recited in claim 3 as, for instance, "Isaac Asimov" and "The Robots of Dawn." (See Specification, page 9, lines 11-15 and page 12, lines 3-7). This specific instance of the "set of information" recited in claim 35 is not explicitly claimed.

For at least this reason, Applicant submits that the rejection of claim 35 and its dependent claims 36-44 under 35 U.S.C. § 112, second paragraph, is improper and should be withdrawn. The phrase "an example" is used in a similar manner in independent claim 45 and accordingly, the rejection of this claim and its dependent claims 46-48 under 35 U.S.C. § 112, second paragraph, is also improper and should be withdrawn.

Claims 49-54 do not contain the phrase "an example." Thus, Applicant submits that the rejection of these claims under 35 U.S.C. § 112, second paragraph, is clearly improper and should be withdrawn.

Rejection Under 35 U.S.C. § 102(b)

Claims 35, 36, and 40-53 stand rejected under 35 U.S.C. § 102(b) based on Mizutani. For the following reasons, Applicant respectfully traverses this rejection.

Claim 35, for example, is directed to a computer-implemented method comprising receiving a set of information that defines an example of information that is being sought; locating occurrences of the received set of information in a database; analyzing the occurrences of the received set of information; and generating, based on the analysis, a pattern in which the set of information occurs in the database. Applicant submits that Mizutani does not disclose each of the features recited in claim 35.

Mizutani is directed to a search technique in which n-character strings are extracted from text data and registered in a "neighboring plural character occurrence bitmap." (See, Mizutani, column 6, lines 18-24). When performing a text search, the

plural character occurrence bitmap is used to improve the search rate of the search. (See, Mizutani, column 6, lines 25-34).

Mizutani completely fails to disclose or suggest receiving a set of information that defines an example of information that is being sought, as recited in claim 35. In contending that Mizutani discloses this aspect of claim 35, the Examiner points to the label "DOCUMENT 1" in Fig. 8 and column 5, lines 1-10 of Mizutani. (Final Office Action, page 3).

Fig. 8 of Mizutani is a diagram illustrating a method of forming a neighboring plural-character occurrence bitmap according to the first embodiment of the invention. (Mizutani, column 8, lines 25-27). The label "DOCUMENT 1" in Mizutani appears to refer to an example portion of a document that is being registered in the neighboring plural character bitmap of Mizutani. (See, Mizutani, column 14, lines 10-14 and 41-54). Registering a document into the neighboring plural character bitmap of Mizutani, however, cannot reasonably be said to disclose or suggest receiving a set of information that <u>defines an example of information that is being sought</u>, as recited in claim 35. DOCUMENT 1 appears to be an example of a document from a corpus of documents that are being indexed or cataloged by Mizutani, but is not an example of information being sought.

The Examiner also points to column 5, lines 1-10 of Mizutani as being relevant to this feature of claim 35. This section of Mizutani states:

> It is a principal object of the present invention, in searching a document constituted by phonetic symbols such as the English language, (1) to improve a search reduction rate of a neighboring plural-character occurrence bitmap in searching a document constituted by phonetic symbols having a small number of characters, (2) to prevent noises to be caused by segmenting a neighboring plural-character string between two

words usually not contained in a search term, from a document when it is registered in a text database, and hashing it in the same entry as an important plural-character constituent, and (3) to prevent a document having a middle matching word from being hit.

(Mizutani, column 4, line 67 through column 5, line 10). This section of Mizutani describes objects in searching a document of the invention of Mizutani. This section of Mizutani in no way discloses or suggests receiving a set of information that defines an example of information that is being sought, as recited in claim 35.

Claim 35 further recites locating occurrences of the received set of information in a database and analyzing the occurrences of the received set of information. Mizutani also does not disclose or suggest this aspect of claim 35. The Examiner contends that Mizutani discloses locating occurrences of the received set of information, as recited in claim 35, at the label "SKIP PLURAL CHARACTER CONSTITUENT" in Fig. 8 and at column 5, lines 11-17. (Final Office Action, page 3).

The label "SKIP PLURAL CHARACTER CONSTITUENT" in Mizutani appears to refer to an example of a portion of three-character strings extracted from DOCUMENT 1. (See Mizutani, column 14, lines 21-24) Extracting three character strings from a document, as disclosed by Mizutani, can not be said to correspond to "locating occurrences of the received set of information," as recited in claim 35. Referring to Fig. 8 of Mizutani, Mizutani does not locate occurrences of the string labeled DOCUMENT 1 and write the occurrences into the box labeled SKIP PLURAL CHARACTER CONSTITUENT, as would be required by the Examiner's interpretation of Mizutani. Instead, this section of Mizutani merely appears to disclose extracting substrings from documents.

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The Examiner also points to column 5, lines 11-17 of Mizutani as being relevant to this feature of claim 35. This section of Mizutani states:

> It is another object of the present invention to realize a neighboring plural-character occurrence bitmap having less noises even if and when a word constituted by phonetic symbols such as English characters is designated as a search term, and to realize a neighboring plural-character occurrence bitmap for a large scale document database capable of suppressing search noises to be caused by hashing.

(Mizutani, column 5, lines 11-17). Although this section of Mizutani mentions a "search term," nothing in this section of Mizutani or any other portion of Mizutani discloses or suggests locating occurrences of the received set of information in a database and analyzing the occurrences of the received set of information, as recited in claim 35.

Claim 35 further recites generating, based on the analysis, a pattern in which the set of information occurs in the database. Mizutani also does not disclose or suggest this aspect of claim 35. In rejecting this claim, the Examiner points to Fig. 9, element 208, and column 6, lines 59-65 of Mizutani as disclosing this aspect of claim 35. Again, Applicant respectfully disagrees with the Examiner's interpretation of Mizutani. Mizutani simply does not disclose or suggest generating a pattern based on the set of information recited in claim 35. The disclosure of Mizutani does not even mention the word pattern, much less generation of a pattern as recited in claim 35.

Column 6, lines 59-65 of Mizutani states:

> When the neighboring plural-character occurrence bitmap is created, at a character appearance frequency judgement step, it is judged from the results at the character appearance frequency calculation step whether the number of occurrence documents in which texts each neighboring plural-character string appears, is larger than a predetermined threshold value.

This section of Mizutani discloses determining whether a number of occurrence documents is greater than a threshold, but in no way relates to generating a pattern as

recited in claim 35. Applicant does not understand how the Examiner is interpreting this section of Mizutani to disclose generating, based on the analysis, a pattern in which the set of information occurs in the database, as recited in claim 35. If the Examiner persists in this rejection, Applicant respectfully requests further explanation from the Examiner.

For at least these reasons, Applicant submits that Mizutani does not disclose or suggest many of the features recited in claim 35, and the rejection of claim 35 should therefore be withdrawn. The rejection of claims 36 and 40-44 based on Mizutani should also be withdrawn, at least by virtue of the dependency of these claims from claim 35.

Claims 36 and 40-44 recite additional features of their own that are not disclosed or suggested by Mizutani. Claim 36, for example, recites that the pattern is defined as text that matches a regular expression. Mizutani does not disclose or suggest generating a pattern, much less generating a pattern defined as text that matches a regular expression. The Examiner contends that column 5, lines 45-54 of Mizutani discloses this aspect of claim 36. (Final Office Action, page 3). Applicant has reviewed this section Mizutani, and submit that this section of Mizutani does not relate to generation of a pattern, much less a pattern defined as text that matches a regular expression. For this reason also, the rejection of claim 36 is improper and should be withdrawn.

Claim 40 further defines the features of claim 35 and recites determining a plurality of different patterns based on the analysis of the occurrences of the set of information. As discussed previously, Mizutani does not disclose the generation of patterns as recited in claim 35. Accordingly, Mizutani could not possibly disclose or suggest determining a plurality of different patterns based on the analysis of the

occurrences of a set of information, as recited in claim 40. For this reason also, the rejection of claim 40 is improper and should be withdrawn.

Claim 41 further recites using the pattern to locate occurrences of additional sets of information. Claim 42 further defines claim 41 and recites analyzing the additional sets of information to determine an additional pattern in which the additional sets of information occur in the database. Mizutani also does not disclose or suggest the features of claims 41 and 42, either alone or in combination. The Examiner points to column 4, lines 43-49 and column 12, lines 11-18 of Mizutani as disclosing the features of claims 41 and 42. (Final Office Action, page 4). Applicant has reviewed these sections of Mizutani and respectfully disagree with the Examiner's interpretation of Mizutani. Nowhere do these sections of Mizutani, or any other section of Mizutani, disclose or suggest using a pattern to locate occurrences of additional sets of information, as recited in claim 41, or analyzing the additional sets of information to determine an additional pattern in which the additional sets of information occur in the database, as recited in claim 42.

Independent claim 45 and its dependent claims 46-48 also stand rejected under 35 U.S.C. § 102(b) based on Mizutani. Claim 45 recites features similar to, although not identical in scope to, those recited in claim 35. Accordingly, based on rationale similar to that given above, Applicant submits that Mizutani also does not disclose or suggest the features of claim 45 and the rejection of this claim should therefore be withdrawn. The rejection of claims 46-48 should also be withdrawn, at least by virtue of their dependency from claim 45.

Independent claim 49 and its dependent claims 50-52 also stand rejected under 35 U.S.C. § 102(b) based on Mizutani. Applicant respectfully traverses this rejection.

Claim 49 is directed to a computing device comprising a memory to store instructions and a processor. The processor is configured to execute the instructions to receive one or more sets of information, locate occurrences of the sets of information in a database, and analyze the occurrences to determine a textual pattern in which the occurrences of the sets of information occur in the database.

In rejecting claim 49, the Examiner does not specifically address the features of this claim and instead gives the same rejection as given for claim 35. As an initial point, Applicant note that claim 49 recites features different than claim 35 and requests that the Examiner specifically address the features of this claim.

In any event, Applicant submits that Mizutani completely fails to disclose or suggest locating occurrences of sets of information in a database and analyzing the occurrences to determine a textual pattern in which the occurrences of the sets of information occur in the database, as recited in claim 49. Mizutani, for example, does not disclose or suggest analyzing occurrences of sets of information to determine a textual pattern, as recited in claim 49.

Applicant believes that the Examiner intends to refer to Fig. 9, element 208, and column 6, lines 59-65 of Mizutani as being relevant to analyzing the occurrences to determine a textual pattern in which the occurrences of the sets of information occur in the database, as recited in claim 49. (Office Action, page 3). Applicant respectfully disagree with the Examiner's interpretation of Mizutani. The disclosure of Mizutani does

not even mention the word pattern, much less determining a textual pattern in which the occurrences of the sets of information occur in a database, as recited in claim 49.

Column 6, lines 59-65 of Mizutani is quoted above. This section of Mizutani relates to determining whether a number of occurrence documents is greater than a threshold, but in no way relates to determining a textual pattern as recited in claim 49. Applicant does not comprehend how the Examiner is interpreting this section of Mizutani to disclose determining a textual pattern in which the occurrences of the sets of information occur in a database, as recited in claim 49. If the Examiner persists in this rejection, Applicant requests further explanation from the Examiner.

Fig. 9 and element 208, which also appear to be cited by the Examiner in rejecting claim 49, also do not disclose or suggest the determination of the textual pattern recited in claim 49. Fig. 9 of Mizutani illustrates a method of searching the neighboring plural character occurrence bitmap of Mizutani. (Mizutani, column 8, lines 28-30). Element 208 of Mizutani corresponds to a hash table creation program. Hash table creation program 208 of Mizutani is said to create "a hash table 216 to be used for the reference to an associated entry of the neighboring plural-character occurrence bitmap 105 and initializes ("0" clear) all entries of the neighboring plural-character occurrence bitmap 105." (Mizutani, column 12, lines 12-19). Creating a hash table that references an entry in a bitmap cannot reasonably be said to be equivalent to determining a textual pattern in which the occurrences of the sets of information occur in a database, as recited in claim 49.

For at least these reasons, Applicant submits that Mizutani clearly does not disclose or suggest each of the features recited in claim 49. Accordingly, the rejection of

this claim based on Mizutani is improper and should be withdrawn. At least by virtue of their dependency on claim 49, Applicant submits that the rejection of claims 50-52 are also improper and should be withdrawn.

Independent claim 53 also stand rejected under 35 U.S.C. § 102(b) based on Mizutani. Applicant respectfully traverses this rejection.

Claim 53 is directed to a computer implemented method for extracting related information from a database. The method includes receiving one or more sets of information from a user; locating occurrences of the sets of information in a database; automatically determining text patterns in which the sets of information are found; locating additional sets of the information based on the text patterns; and automatically determining additional text patterns based on the additional sets of information.

Mizutani does not disclose or suggest the features of claim 53. Mizutani, for example, does not disclose or suggest automatically determining text patterns in which sets of information are found. A feature similar to this was discussed above with respect to claim 49. As discussed, Mizutani, at, for example, column 6, lines 59-65 discloses determining whether a number of occurrence documents is greater than a threshold. Mizutani, however, cannot be said to disclose automatically determining text patterns in which sets of information are found.

Claim 53 further recites "locating additional sets of the information based on the text patterns." In rejecting claim 53, the Examiner does not address this feature. In any event, however, Applicant submits that at least because Mizutani does not determine the text patterns recited in claim 53, Mizutani could not possibly disclose or suggest locating additional sets of the information based on the text patterns.

Claim 53 further recites "automatically determining additional text patterns based on the additional sets of information." In rejecting claim 53, the Examiner does not address this feature. In any event, however, Applicant submits that Mizutani completely fails to disclose or suggest this feature of claim 53.

For at least these reasons, Applicant submits that Mizutani does not disclose or suggest each of the features of claim 53 and accordingly, the rejection of claim 53 under 35 U.S.C. § 102(b) is improper and should be withdrawn.

Rejection Under 35 U.S.C. § 103(a)

Claims 37-39 and 54 stand rejected under 35 U.S.C. § 102(b) based on Mizutani in view of Hita. Regarding claims 37-39, Applicant has reviewed Hita and submit that Hita does not cure the above mentioned deficiencies of Mizutani with respect to claim 35. Further, regarding claim 54, Applicant has reviewed Hita and submit that Hita does not cure the above mentioned deficiencies of Mizutani with respect to claim 53. For at least this reason, the rejections of claims 37-39 and 54 are improper and should be withdrawn.

Conclusion

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 35-54 in condition for allowance.

This Amendment should allow for immediate entry by the Examiner, as the amendment to claim 54 merely corrects an obvious typographical error in claim 54.

As Applicant's remarks with respect to the Examiner's rejections overcome the rejections, Applicant's silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a

reference constitutes prior art, motivation to combine references, assertions regarding

dependent claims, etc.) is not a concession by Applicant that such assertions are accurate

or that such requirements have been met, and Applicant reserves the right to dispute these

assertions/requirements in the future.

In view of the foregoing amendments and remarks, Applicant respectfully

requests the Examiner's reconsideration of this application, and the timely allowance of

the pending claims.

For at least the foregoing reasons, Applicant respectfully requests the

reconsideration of this application and the allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this

paper, including extension of time fees, to Deposit Account No. 50-1070 and please

credit any excess fees to such deposit account.

Respectfully submitted,

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